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METHODS AND APPARATUS FOR MANAGING OBJECTS IN A CLIENT-SERVER COMPUTING SYSTEM ENVIRONMENT

ABSTRACT OF THE DISCLOSURE

Mechanisms and techniques allow computer systems to create and exchange uniquely identified shared objects. Using this invention, a client computer system can operate client software to generate local object definitions in a local object specification. To assure that the local object definitions created by the client are uniquely identifiable by this client, as well as by a server and possibly other clients which may require access to such object definitions (e.g., other clients in a collaboration software system), the invention allows the client to send the local object specification to the server for unique identification of the object definitions. The server receives the local object specification containing the local object definitions created by the client and can convert each local object definition within the local object specification to a global object definition in a global object specification. Each global object definition includes a system-wide unique global object identification assigned by the server that uniquely identifies the global object definition on the server, as well across any clients in communication with the server. The server then returns the global object specification containing the uniquely identified global object definitions to the client. The client then compares the global object specification to the local object specification to determine if the server properly created the global object specification based on the local object specification. Assuming the server properly creates the global object specification, the client replaces the local object specification with the global object specification such that the client can operate on global object definitions that are guaranteed to be uniquely identified.